GEOG2M - Introduction

Introduction

GEOG2M - Teaching profile

Learning outcomes

The organization of the space in which we live results from the impact of man on his natural surroundings. It comes from a great many decisions, taken long ago or recently, which have shaped our environment by adapting it to our needs, for better and for worse. These decisions have stimulated development and also created imbalances : more productive world agriculture, industrial concentrations, urbanization, trade at every level, increase in average well-being, but also delocalization, pollution, damage to land, deforestation, erosion of biodiversity or climate change. Geography studies the mechanisms which have led to all these effects, in order to control them better.

The objective of the training with a **research focus** is an introduction to the three fundamental aspects of the work of a geographer:

- to observe and describe the environment, especially with computerized databases and advanced satellite observation technology and monitoring the state of the environment through different kinds of measurements ;
- to understand and explain the processes that have been observed, especially by building models which enable them to be simulated;
- to manage resources through land development.

Students will develop skills in the field of geography and especially in the study of the interactions between human activities, geographical space and the natural environment. This is done from the perspective of both human and physical geography: it is important to bring them together. The training also provides students with the geographical techniques necessary for the study of this.

The **research focus** prepares students for a range of different jobs in the public and private sector or in the voluntary field as well as for being a researcher.

The **teaching focus** is a specially adapted programme which focuses on teaching at the higher levels of secondary education.

On successful completion of this programme, each student is able to :

1. Analyser les questions environnementales sous l'angle du développement durable, d'un territoire jusqu'au système Terre:

1.1 Décrire les composantes physiques, biologiques, humaines du territoire jusqu'au système Terre.

1.2 Décrire les interactions entre ces composantes et leurs dynamiques spatiales.

1.3 Passer de la description à la formalisation.

- 1.3.1 Identifier les processus sous-jacents sur base des schémas d'organisation spatiale.
- 1.3.2 Formaliser la compréhension des mécanismes qui expliquent les relations spatiales observées via des modèles spatiaux statistiques et de simulation, et grâce à des théories géographiques.

1.4 Passer de la formalisation à la prospective et à l'évaluation des politiques d'intervention:

- 1.4.1 Être capable d'explorer, entre autres via des modèles, l'effet de la modification de certaines variables sur le territoire jusqu'au système Terre;
- 1.4.2 Être capable de proposer des interventions (politiques de planification, de gestion, d'aménagement du territoire, etc.) sur base de simulations et scénarios.

2. Maitriser les outils de collecte, visualisation et analyse des données spatiales:

1. 2.1 h 7p 1 0 0 -1 0 306.91299rf1

LIST OF FOCUSES

Given the importance of the reform of the Master of Geographical Sciences program, from 2024-25 onwards, the full program for students choosing the didactic option will be a transitional program.

> Research Focus *[en-prog-2024-geog2m-lgeog200a]*
> Teaching Focus *[en-prog-2024-geog2m-lgeog200d]*

RESEARCH FOCUS [30.0]

- Mandatory
- Optional
- Not offered in 2024-2025
- Not offered in 2024-2025 but offered the following year
- Offered in 2024-2025 but not the following year
- Not offered in 2024-2025 or the following year
- Activity with requisites
- Open to incoming exchange students
- Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Content:

				Year 1	Year 2
LGEO2997	Séminaire d'encadrement du mémoire	Michel Crucifix	FR [q1] [15h] [5 Credits]	x	
LGEO2998	Thesis tutorial	Ahmed Adrioueche Qiuzhen Yin	EN [q2] [15h] [3 Credits]		x

Module 5 : Global change and sustainability (22 credits)

LGEO2120	Applied geomorphology		EN [q1] [30h+30h] [4 Credits]	x	x
LGEO2130	Fundamentals of geographic and environmental modelling	Eric Deleersnijder Sophie Vanwambeke	EN [q2] [30h+30h] [5 Credits]	x	x
LGEO2220	History of geography	Eric Lambin	FR [q1] [22.5h] [4 Credits]	x	
LGEO2210	Shaping sustainable urban areas		FR [q1] [30h] [4 Credits] *> English-friendly*		

TEACHING FOCUS [30.0]

IMPORTANT NOTE: In accordance with article 138 para. 4 of the decree of 7 November 2013 concerning higher education and the academic organisation of studies, teaching practice placements will not be assessed in the September session. Students are required to make every effort to successfully complete the teaching practice in the June session, subject to having to retake the year.

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Year
1 2

Content:

Year
1 2

Module comprendre et analyser l'institution scolaire et son contexte (6 credits)

Séminaire d'observation et d'analyse de l'institution scolaire et de son contexte (en ce compris le stage d'observation) (4 credits)
Choisir 1 des activités suivantes. Le cours et le séminaire doivent être suivis au même quadrimestre.

LAGRE2120P	Observation et analyse de l'institution scolaire et de son contexte (en ce compris le stage d'observation)	

				Year 1	2
⊠ LSPRI2020	Relations internationales contemporaines	Simon Desplanque Michel Liegeois	FR [q1] [30h+15h] [5 Credits]	x	x

⊠ Autres cours au choix

Sous réserve de l'accord du jury, l'étudiant.e peut intégrer à son programme des cours de 2ème ou 3ème bloc annuel de bachelier qui n'auraient pas été suivis durant le bachelier, ainsi que des cours dispensés dans d'autres universités. L'étudiant.e s'assurera auprès du titulaire du ou des cours choisi(s) qu'il est autorisé à le(s) suivre.

⊠ LGEO2400	Internship in a professional setting	Sophie Vanwambeke (coord.)	FR [q1 or q2] [15h] [4 Credits]	x	x
⊠ LPHYS2162	Introduction to the physics of the climate system and its modelling	Hugues Goosse Francesco Ragone	EN [q1] [22.5h+22.5h] [5 Credits] *> French-friendly*	x	x
⊠ LENVI2005	Climate change: impacts and solutions		FR [q2] [30h] [3 Credits]	x	x

⊠ Cours au choix complémentaires pour la finalité didactique

⊠ LGEO2170	Field Excursion	Eric Lambin	FR [q2] [60h+30h] [4 Credits]	x	x
⊠ LAGRE2221	Learning and teaching with new technologies	Sandrine Decamps	FR [q1] [15h+15h] [2 Credits]	x	x
⊠ LAGRE2310	Micro-teaching exercises	Marc Blondeau Pascalia Papadimitriou	FR [q1 or q2] [15h] [2 Credits]	x	x

⊠ Optional courses :

These credits are not counted within the 120 required credits.

⊠ LSST1001	IngénieuxSud	Stéphanie Merle Jean-Pierre Raskin	FR [q1+q2] [15h+45h] [5 Credits]	x	x
⊠ LSST1002M	Information and critical thinking - MOOC	Anne Bauwens (compensates Jean-François Rees) Myriam De Kesel	FR [q2] [30h+15h] [3 Credits]		

Supplementary classes

To access this Master, students must have a good command of certain subjects. If this is not the case, in the first annual block of their Masters programme, students must take supplementary classes chosen by the faculty to satisfy course prerequisites.

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Enseignements supplémentaires

Specific professional rules

Successful completion of the master's course with **teaching focus** leads to the award of the master's degree with teaching focus and the title of secondary school education specialist.

The Réforme des Titres et Fonctions ("Titles and Functions Reform"), in force since 1 September 2016, is intended to harmonise the titles, functions and pay scales of basic and secondary education professionals in French Community of Belgium networks.

It also aims to guarantee the priority of preferred titles over minimum titles and to establish a regime for titles in short supply.

AESS holders can learn which functions they can carry out and the pay scales from which they can benefit by clicking here.

The university cannot be held responsible for any problems that students may encounter at a later date with a view to a teaching appointment in the French Community of Belgium.

Teaching method

The teaching strategy takes its inspiration from the idea of â€˜taking responsibility for oneâ€™s own learningâ€™ and offers a wide range of learning situations. The courses are focused on problems in society: environmental changes, mobility, urbanization, globalization and developing countries. Activities such as seminars and integrated exercises are carried out in advanced areas of geographical research. Ability to use advanced methods of geographical analysis is an important objective of the training: geographical modeling, geographical information systems and satellite teledetection.

Practical work gives students the opportunity of dealing with concrete problems and finding solutions to them, often in small groups. The computer rooms with special software for geographical analysis are always open to students. In the first year of the Master, the field work consists of a week of supervised exercises in the Alps or Spain. This is compulsory in the first year of the Master. Students who choose a research focus must do a second field course in the second year.

Students doing the teaching focus may do advanced teaching in mathematics, physics or geography.

Evaluation

The evaluation methods comply with the regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading “Learning outcomes evaluation method”.

Students will mainly be assessed on the basis of individual work (e.g. reading, consultation of databases and bibliographic references, writing monographs and reports, presentation of seminars, dissertation and work placement). Where necessary, students will also be assessed on how much they have learned from lectures. As far as possible, there will be continuous assessment, including regular ‘open book examinations’. Certain activities will not be given a precise mark but will be officially certified. Assessment of the dissertation is in two stages : a ‘progress report’ at the end of the first year of the Master and the final presentation.

Contacts

Curriculum Management

Entity

Structure entity	SST/SC/GEOG
Denomination	(GEOG)
Faculty	Faculty of Science (SC)
Sector	Sciences and Technology (SST)
Acronym	GEOG
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Website	https://uclouvain.be/fr/facultes/sc/geo

Academic supervisor: Sophie Vanwambeke

Jury

- President: Thierry Fichefet
- Secretary: Veerle Vanacker
- Study advisor: